In the Claims:

The claims listing is as follows:

1. (Currently Amended) A method for treating a material, comprising:

forming an ozone-solvent solution at a first temperature;

passing said ozone-solvent solution through a heater to heat said ozone-solvent solution from said first temperature to form a heated [-]ozone-solvent solution relative to said first temperature, such that said heated ozone-solvent solution is supersaturated with ozone; and

reacting the supersaturated heated ozone-solvent solution with the material at a second temperature;

wherein the first temperature is less than the second temperature.

2. (Previously Presented) The method of claim 1, wherein said ozone-solvent solution is formed at said first temperature by dissolving an ozone gas in solvent at said first temperature.
3. (Previously Presented) The method of claim 1, wherein the second temperature is at least 5 degrees Celsius greater than the first temperature.
4. (Previously Presented) The method of claim 3, wherein the first temperature is between 1 and 30 degrees Celsius.
5. (Previously Presented) The method of claim 3, wherein the first temperature is between 1 and 10 degrees Celsius.
6. (Previously Presented) The method of claim 3, wherein the second temperature is between 30 and 95 degrees Celsius.
7. (Previously Presented) The method of claim 3, wherein the second temperature is between 35 and 65 degrees Celsius.
8. Cancelled
9. (Currently Amended) The method of Claim 2, wherein said supersaturated heated ozone-solvent solution is reacted with the material within a time period after heat is

first applied to said ozone-solvent solution in said heater to minimize a decrease in concentration of the dissolved ozone in the supersaturated heated ozone-solvent solution.

10. (Currently Amended) The method of claim 9, wherein the time period is such that the concentration of the supersaturated heated ozone-solvent solution at said second temperature is greater than if said ozone-solvent solution had been formed at said second temperature.

11. (Currently Amended) The method of Claim 9, wherein the time period corresponds to no more than a 20 percent decrease in the concentration of the dissolved ozone in the supersaturated heated ozone-solvent solution from the concentration at the first temperature.

12. (Currently Amended) The method of Claim 1, wherein reacting said supersaturated heated ozone-solvent solution with the material comprises applying the supersaturated heated ozone-solvent solution to the material using at least one nozzle.

13. (Currently Amended) The method of Claim 1, wherein reacting the supersaturated heated ozone-solvent solution with the material comprises immersing the material within the supersaturated heated ozone-solvent solution.

14. (Currently Amended) The method of claim 1, wherein said step of reacting said supersaturated heated ozone-solvent solution with said material has at least one point of reaction, and wherein the heater comprises using a liquid-to-liquid heat exchanger placed just upstream of the at least one point of reaction of said supersaturated heated ozone-solvent solution with said material.

15. (Currently Amended) The method of claim 1, wherein said step of reacting said supersaturated heated ozone-solvent solution with said material has at least one point of reaction, and wherein the heater comprises an in-line heater placed just upstream of the at least one point of reaction of said supersaturated heated ozone-solvent solution with said material.

16. Cancelled

17. (Currently Amended) The method of Claim 1, further comprising:

injecting a chemical into said supersaturated heated ozone-solvent solution

prior to reacting said supersaturated heated ozone-solvent solution with said material.

18. Cancelled

19. (Previously Presented) The method of Claim 17, wherein the chemical comprises a hydroxyl radical scavenger.

20. (Previously Presented) The method of Claim 17, wherein the chemical comprises an element selected from the group consisting of a pH buffer, an acid, and a base.

21. (Previously Presented) The method of Claim 17, wherein the chemical comprises a corrosion inhibitor.

22. (Previously Presented) The method of Claim 17, wherein the chemical comprises a surfactant.

23. Cancelled

24. (Currently Amended) The method of Claim 1, wherein said material comprises a substrate, and wherein the step of reacting said supersaturated heated ozone-solvent solution with said substrate comprises:

spinning said substrate to achieve a rotational speed about an axis; and

dispensing said supersaturated heated ozone-solvent solution over at least a portion of at least one surface of the spinning substrate using at least one nozzle.

25. (Previously Presented) The method of Claim 24, wherein said at least one nozzle is positioned on said axis.

26. (Previously Presented) The method of Claim 24, wherein a plurality of nozzles are positioned in a plurality of positions over the substrate.

27. (Currently Amended) The method of Claim 1, wherein said material comprises a substrate, said method further comprising the step of rinsing the substrate after the substrate is reacted with said supersaturated heated ozone-solvent solution.

28. (Previously Presented) The method of Claim 1, wherein the material comprises a planar substrate selected from the group consisting of semiconductor wafers, flat panel displays, and memory discs, substrates for use in an electronic device.

29. (Previously Presented) The method of Claim 1, wherein the material is selected from the group consisting of photoresist, post etch resist residue, post etch residue, anti-reflective coating, organic contamination.

30. Cancelled

31. (Currently Amended) A method for oxidizing a material, comprising:

forming an ozone-solvent solution at a first temperature;

passing the ozone-solvent solution through a heater to heat said ozone-solvent solution from the first temperature to form a supersaturated heated ozone-solvent solution; and

after the step of heating the ozone-solvent solution, reacting the supersaturated heated ozone-solvent solution with the material at approximately the second temperature to oxidize the material.

32. (Previously Presented) The method of Claim 31, further comprising rinsing the material.

33. (Previously Presented) The method of Claim 31, wherein the second temperature is at least 5 degrees Celsius greater than the first temperature.

34. (Previously Presented) The method of Claim 31, wherein the first temperature is between 1 and 30 degrees Celsius.

35. (Previously Presented) The method of Claim 31, wherein the second temperature is between 30 and 95 degrees Celsius.

36. (Currently Amended) The method of Claim 31, wherein reacting the ozone-solvent solution with the material comprises applying the supersaturated heated ozone-solvent solution to the material.

37. Cancelled

38. Cancelled

39. (Currently Amended) The method of Claim 31, further comprising:
injecting a chemical into the supersaturated heated ozone-solvent solution prior to applying the supersaturated heated ozone-solvent solution to the material.

40-115 Cancelled

116. (Previously Presented) The method of Claim 24, further comprising the step of moving said nozzle relative to said substrate.

117-120 Cancelled

121. (Currently Amended) The method of claim 1, wherein said step of reacting said supersaturated heated ozone-solvent solution with said material comprises passing

said supersaturated heated ozone-solvent solution through an orifice that directs said supersaturated heated ozone-solvent solution toward said material, and wherein the heater is placed just upstream of said orifice.

122. (Newly Presented) The method of any one of Claims 1-7, Claims 9-29, Claims 31-36, Claim 39, Claim 116, Claim 121, and claims 123-128 further comprising:

removing undissolved ozone gas prior to the step of passing said ozone-solvent solution through said heater.

123. (Newly Presented) The method of Claim 1, further comprising:

injecting a chemical into said supersaturated heated ozone-solvent solution prior to reacting said supersaturated heated ozone-solvent solution with said material.

124. (Newly Presented) The method of Claim 1, further comprising:

injecting a chemical into said ozone-solvent solution
prior to passing said ozone-solvent solution through said heater.

125. (Newly Presented) The method of claim 24 wherein said at least one nozzle is successively positioned at one or more positions relative to the center of rotation of said substrate.

126. (Newly Presented) The method of Claim 12, further comprising passing said supersaturated heated ozone-solvent solution through at least one element selected from the group consisting of a back pressure regulator, a pressure dropping orifice, and a needle valve, prior to applying the supersaturated ozone-solvent solution to the material using at least one nozzle.

127. (Newly Presented) The method of Claim 1, further comprising passing said supersaturated heated ozone-solvent solution through at least one element selected from the group consisting of a back pressure regulator, a pressure dropping orifice, and a needle valve, prior to applying the supersaturated ozone-solvent solution to the material.

128. (Newly Presented) The method of claim 1 further comprising contacting said supersaturated heated ozone-solvent solution with, or flowing said supersaturated heated ozone-solvent solution through, one or more sensors selected from the group consisting of a pH sensor, temperature sensor, and a dissolved ozone concentration sensor.